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IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. A method of inhibiting alcohol consumption comprising administering a therapeutically effective amount of a selective melanocortin 4 receptor agonist to a subject in need thereof wherein the selective melanocortin 4 receptor agonist is a compound of Formula I:

$$\begin{array}{c|cccc} (CH_2)_{\overline{m}} & Z & Y & (CH_2)_n \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & &$$

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wherein:

His is L-histidyl;

D-Phe(X) is D-phenylalanyl unsubstituted or optionally para-substituted with a group selected from F, Cl, Br, Me, and OMe;

Arg is L-arginyl;

W is L-tryptophanyl or 2-naphthyl-L-alanyl;

one of Y and Z is -C(O)- and the other is -NH-;

m is 1 to 4;

n is 1 to 4, provided that n+m is 4 to 6; or

a pharmaceutically acceptable salt thereof.

- 2. The method of Claim 1 wherein Y is -C(O)- and Z is -NH-.
- 3. The method of Claim 2 wherein m is 2 and n is 2.
- 4. The method of Claim 3 selected from:

$$\begin{array}{c|c} (CH_2)_{\overline{m}} & Z & Y & (CH_2)_n \\ & & & \\ & & & \\ & C(O)\text{-His}-D\text{-Phe}(X)-Arg-W-N-C-C(O)NH_2 \\ & & H & H \end{array}$$

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| Z | Y | X | w | m | n |
|----|------|---|-----|---|---|
| NH | C(O) | Н | Trp | 4 | 2 |
| NH | C(O) | Н | Trp | 3 | 2 |
| NH | C(O) | Н | Trp | 2 | 2 |
| NH | C(O) | н | Trn | 1 | 2 |

or a pharmaceutically acceptable salt thereof.

- 5. The method of Claim 4 selected from cyclo(NH-CH₂-CH₂-CO-His-D-Phe-Arg-Trp-Glu)-NH₂, or a pharmaceutically acceptable salt thereof.
- 6. A method of reducing alcohol consumption comprising administering a selective melanocortin 4 receptor agonist, or a pharmaceutically acceptable salt thereof, to a subject in need thereof wherein the selective melanocortin 4 receptor agonist is a compound of Formula I:

$$(CH_2)_{\overline{m}} Z - Y - (CH_2)_n$$

$$| \qquad | \qquad |$$

$$C(O)-His-D-Phe(X)-Arg-W-N-C-C(O)\cdot NH_2$$

$$| \qquad | \qquad |$$

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wherein:

His is L-histidyl;

D-Phe(X) is D-phenylalanyl unsubstituted or optionally para-substituted with a group selected from F, Cl, Br, Me, and Ome;

Arg is L-arginyl;

W is L-tryptophanyl or 2-naphthyl-L-alanyl;

one of Y and Z is -C(O)- and the other is -NH-;

m is 1 to 4;

n is 1 to 4, provided that n+m is 4 to 6; or

a pharmaceutically acceptable salt thereof.

7. The method of Claim 6 wherein the compound of Formula I is selected from:

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| Z | Y | X | W | m | n |
|----|------|---|-----|---|---|
| NH | C(O) | H | Trp | 4 | 2 |
| NH | C(O) | Н | Trp | 3 | 2 |
| NH | C(O) | Н | Trp | 2 | 2 |
| NH | C(O) | Н | Тгр | 1 | 2 |

or a pharmaceutically acceptable salt thereof.

- 8. The method of Claim 7 wherein the compound of Formula I is selected from cyclo(NH-CH₂-CO-His-D-Phe-Arg-Trp-Glu)-NH₂, or a pharmaceutically acceptable salt thereof.
- 9. A method of treating alcoholism comprising administering a selective melanocortin 4 receptor agonist, or a pharmaceutically acceptable salt thereof, to a subject in need thereof wherein the selective melanocortin 4 receptor agonist is a compound of Formula I:

$$(CH_2)_{\overline{m}} - Z - Y - (CH_2)_n$$

$$C(O)-His-D-Phe(X)-Arg-W-N-C-C(O)\cdot NH_2$$

$$H H$$

Ι

wherein:

His is L-histidyl;

D-Phe(X) is D-phenylalanyl unsubstituted or optionally para-substituted with a group selected from F, Cl, Br, Me, and OMe;

Arg is L-arginyl;

W is L-tryptophanyl or 2-naphthyl-L-alanyl;

one of Y and Z is -C(O)- and the other is -NH-;

m is 1 to 4;

n is 1 to 4, provided that n+m is 4 to 6; or

a pharmaceutically acceptable salt thereof.

10. A method of treating alcohol abuse comprising administering a selective melanocortin 4 receptor agonist, or a pharmaceutically acceptable salt thereof, to a subject in need thereof wherein the selective melanocortin 4 receptor agonist is a compound of Formula I:

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$$(CH_2)_{\overline{m}} Z - - - - - (CH_2)_{\overline{n}}$$

$$C(O)-His-D-Phe(X)-Arg-W-N-C-C(O)\cdot NH_2$$

$$H H$$

I

wherein:

His is L-histidyl;

D-Phe(X) is D-phenylalanyl unsubstituted or optionally para-substituted with a group selected from F, Cl, Br, Me, and OMe;

Arg is L-arginyl;

W is L-tryptophanyl or 2-naphthyl-L-alanyl;

one of Y and Z is -C(O)- and the other is -NH-;

m is 1 to 4;

n is 1 to 4, provided that n+m is 4 to 6; or

a pharmaceutically acceptable salt thereof.

- 11. A method of inhibiting alcohol consumption comprising administering to a subject in need thereof a therapeutically effective amount of a selective melanocortin 4 receptor agonist, or a pharmaceutically acceptable salt thereof, with a functional activity characterized by an EC₅₀ at least 15-fold more selective for the human melanocortin 4 receptor than for the human melanocortin 1 receptor, the human melanocortin 3 receptor and the human melanocortin 5 receptor.
- 12. The method of Claim 11 wherein the functional activity of the melanocortin 4 receptor agonist is characterized by an EC₅₀ at least 17-fold more selective for the human melanocortin 4 receptor than for the human melanocortin 3 receptor.
- 13. The method of Claim 11 wherein the functional activity of the melanocortin 4 receptor agonist is characterized by an EC₅₀ at least 90-fold more selective for the human melanocortin 4 receptor than for the human melanocortin 3 receptor.
- 14. The method of Claim 11 wherein the functional activity of the melanocortin 4 receptor agonist is characterized by an EC₅₀ at least 200-fold more selective for the human melanocortin 4 receptor than for the human melanocortin 5 receptor.
- 15. The method of Claim 11 wherein the functional activity of the melanocortin 4 receptor agonist is characterized by an EC₅₀ at least 3000-fold more selective for the human

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melanocortin 4 receptor than for the human melanocortin 5 receptor.

Claims 16 – 19 (canceled)